WEST Search History

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DATE: Thursday, January 25, 2007

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ		
☐	L23	L16 and @py<2003	1
☐	L22	L15 and @py<2003	0
☐	L21	L14 and @py<2003	0
☐	L20	L13 and @py<2003	6
☐	L19	L12 and @py<2003	1
☐	L18	L11 and @py<2003	0
☐	L17	L10 and @py<2003	1
☐	L16	L12 and therapeutic	42
☐	L15	L14 and therapeutic	14
☐	L14	L9 and mesodermal	15
☐	L13	L9 and endothelial	60
☐	L12	L9 and nerve	44
☐	L11	L9 and myocardial	16
☐	L10	L9 and mesenchymal	48
☐	L9	L8 and l6	63
☐	L8	L7 and l4	141
☐	L7	cd45 and collagen	1071
☐	L6	L5 and l4	148
☐	L5	cd14 and cd34	1132
☐	L4	monocyte and multipotent	683
	DB=DWPI,JPAB,EPAB,USOC,USPT,PGPB; PLUR=YES; OP=ADJ		
☐	L3	KODAMA-HIROAKI!	109
☐	L2	KUWANA-MASATAKA!	12
☐	L1	KUWANA-MASATAKA!	12

END OF SEARCH HISTORY

Case 10/549,207,
WEST (PGPB, USPT, USOT, DWPI, JPAB, & EPAB)
1/25/07
AD

FILE 'MEDLINE' ENTERED AT 20:23:40 ON 25 JAN 2007

FILE 'BIOSIS' ENTERED AT 20:23:40 ON 25 JAN 2007

=> s monocyte and multipotent cell
L1 20 MONOCYTE AND MULTIPOTENT CELL

=> s cd14 and cd34
L2 1499 CD14 AND CD34

=> s l1 and l2
L3 1 L1 AND L2

=> s cd45 and collagen
L4 270 CD45 AND COLLAGEN

=> s l1 and l4
L5 0 L1 AND L4

=> s l1 and differentiation
L6 13 L1 AND DIFFERENTIATION

=> disp l6 ibib abs 1-13

L6 ANSWER 1 OF 13 MEDLINE on STN
ACCESSION NUMBER: 2001696669 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11745340
TITLE: Distinct and regulated expression of Notch receptors in hematopoietic lineages and during myeloid differentiation.
AUTHOR: Jonsson J I; Xiang Z; Pettersson M; Lardelli M; Nilsson G
CORPORATE SOURCE: Department of Laboratory Medicine, Lund University, University Hospital MAS, Malmo, Sweden..
Jan-Ingvar.Jonsson@molmed.mas.lu.se
SOURCE: European journal of immunology, (2001 Nov) Vol. 31, No. 11, pp. 3240-7.
Journal code: 1273201. ISSN: 0014-2980.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 18 Dec 2001
Last Updated on STN: 25 Jan 2002
Entered Medline: 3 Jan 2002

AB Hematopoietic development is a delicate balance of cell fate decisions in multipotent cells between self-renewal and differentiation. In multiple developmental systems, the Notch receptors are important factors regulating these processes. Hematopoietic progenitor cells have been shown to express Notch1, and studies with an activated intracellular form has revealed a functional role. To assess the function of other Notch members in hematopoiesis, we investigated the expression pattern of Notch1, Notch2, and Notch3 in hematopoietic lineages at the level of RNA and protein. We demonstrate that Notch1 and Notch2 are expressed in multiple lineages, and that Notch1 in particular appears to be regulated during myeloid differentiation. Notch1 was up-regulated and expressed at high levels in adherent macrophages. Mast cells expressed only low levels of Notch1 mRNA whereas Notch2 mRNA was highly expressed. In addition we could detect Notch3 mRNA and protein in cell lines representing mast cell progenitors. These expression patterns imply that the different Notch genes may have very distinct functions during hematopoiesis, and that Notch3 could be a specific regulator of

Case 10/549,707
STN (BIOSIS, MEDLINE)
1/28/07 AD

mast cell development. The finding that Notch1 was up-regulated in the adherent cells developing from a multipotent progenitor cell line suggests that this protein may posses dual functions in hematopoiesis, i.e. at the stage of cell fate decision, and at the maturation stage of monocytes when adhesion to the specific microenvironment is accomplished.

L6 ANSWER 2 OF 13 MEDLINE on STN
ACCESSION NUMBER: 2000041925 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10576506
TITLE: Differential activity of glycosaminoglycans on colony-forming cells from cord blood. Preliminary results.
AUTHOR: Da Prato I; Valentini P; Testi R; Volpi N; Conte A; Petrini M
CORPORATE SOURCE: Oncology Department, University of Pisa, Italy.
SOURCE: Leukemia research, (1999 Nov) Vol. 23, No. 11, pp. 1015-9.
Journal code: 7706787. ISSN: 0145-2126.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 13 Jan 2000
Last Updated on STN: 2 May 2002
Entered Medline: 8 Dec 1999

AB Heparin, heparan sulfate and chondroitin sulfate were evaluated for their possible role on proliferation and differentiation of hematological precursor cells from cord blood. For these purposes, different concentrations of glycosaminoglycans were added to methyl-cellulose in colony assay performed with human cord blood derived cells. A volume of 10 microg/ml heparin induces a significant increase of both granulocyte-monocyte and granulocyte colonies, and a decrease of erythroid-colonies, more evident in the presence of 100 microg/ml. Heparan sulfate-treatment induces a significant increase of all granulocyte-monocyte colonies derived from CFU-granulocyte-monocyte, CFU-granulocyte and CFU-monocyte precursors. A significant decrease of multipotent cells was also observed. On the other hand, chondroitin sulfate induces an increase of granulocyte-colonies and a decrease of erythroid-colonies. Glycosaminoglycans with different structure may be useful to increase the number of specific colonies. The selective and differential binding of glycosaminoglycans with several growth factors and the regulation of their activities is discussed.

L6 ANSWER 3 OF 13 MEDLINE on STN
ACCESSION NUMBER: 96145215 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8558943
TITLE: Mutant ras promotes haemopoietic cell proliferation or differentiation in a cell-specific manner.
AUTHOR: Maher J; Baker D; Dibb N; Roberts I
CORPORATE SOURCE: Department of Haematology, Royal Postgraduate Medical School, Hammersmith Hospital, London, UK.
SOURCE: Leukemia : official journal of the Leukemia Society of America, Leukemia Research Fund, U.K, (1996 Jan) Vol. 10, No. 1, pp. 83-90.
Journal code: 8704895. ISSN: 0887-6924.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199602
ENTRY DATE: Entered STN: 12 Mar 1996
Last Updated on STN: 3 Feb 1997
Entered Medline: 26 Feb 1996

AB The ras gene products play a fundamental role in signal transduction in haemopoiesis. In this study, we have examined the effects of ras upon haemopoietic cell proliferation and differentiation, using two human cell lines which represent different stages of haemopoietic cell maturation. When a mutant H12-ras gene (codon 12: gly-->asp) was expressed in the monoblastic cell line, U937, marked inhibition of growth was seen together with morphological, functional and immunophenotypic evidence of monocytic maturation. Infection of U937 cells with a c-myc retrovirus produced similar changes strongly suggesting that Myc plays an important role in this action of Ras. By contrast, expression of H12-ras promoted factor-independent growth of the multipotent cell line, TF-1. Furthermore, mutant ras dramatically enhanced the growth of TF-1 cells in the presence of added GM-CSF or erythropoietin, but did not influence the state of differentiation of these cells. These data clearly indicate that in haemopoietic cells, Ras may promote either proliferation or differentiation depending upon cell type and/or state of maturation.

L6 ANSWER 4 OF 13 MEDLINE on STN
ACCESSION NUMBER: 95267050 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7748171
TITLE: Retinoic acid and the differentiation of lymphohaemopoietic stem cells.
AUTHOR: Gottgens B; Green A R
CORPORATE SOURCE: Department of Haematology, Cambridge University, MRC Centre, UK.
SOURCE: BioEssays : news and reviews in molecular, cellular and developmental biology, (1995 Mar) Vol. 17, No. 3, pp. 187-9. Ref: 21
Journal code: 8510851. ISSN: 0265-9247.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199506
ENTRY DATE: Entered STN: 21 Jun 1995
Last Updated on STN: 21 Jun 1995
Entered Medline: 9 Jun 1995

AB The study of haemopoiesis enables us to address one of the central questions of developmental biology, concerning the molecular mechanisms by which a multipotent cell develops into distinct differentiated progeny. Recent work suggests specific roles for retinoic acid receptors at two distinct stages of haemopoiesis. Continuous cell lines of lymphohaemopoietic progenitors were established by infection with a retrovirus containing a dominant negative retinoic acid receptor. The cell lines depend on stem cell factor for their proliferation and can be induced to diffentiate into B-lymphocytes, erythrocytes, neutrophils, monocytes, mast cells and megakaryocytes. Since lymphohaemopoietic progenitors represent less than 0.01% of nucleated marrow cells, immortalised progenitors provide a valuable system with which to study haemopoiesis on a molecular level.

L6 ANSWER 5 OF 13 MEDLINE on STN
ACCESSION NUMBER: 93257668 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7683918
TITLE: Expression of human colony-stimulating factor-1 (CSF-1) receptor in murine pluripotent hematopoietic NFS-60 cells induces long-term proliferation in response to CSF-1 without loss of erythroid differentiation potential.
AUTHOR: Bourette R P; Mouchiroud G; Ouazana R; Morle F; Godet J; Blanchet J P
CORPORATE SOURCE: Centre de Genetique Moleculaire et Cellulaire, UMR CNRS no.

106, Universite Claude Bernard Lyon I, Villeurbanne, France.
SOURCE: Blood, (1993 May 15) Vol. 81, No. 10, pp. 2511-20. Journal code: 7603509. ISSN: 0006-4971.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199306
ENTRY DATE: Entered STN: 25 Jun 1993
Last Updated on STN: 3 Mar 2000
Entered Medline: 11 Jun 1993

AB NFS-60 and FDCP-Mix cells are interleukin-3--dependent multipotent hematopoietic cells that can differentiate in vitro into mature myeloid and erythroid cells. Retrovirus-mediated transfer of the human colony-stimulating factor-1 (CSF-1) receptor gene (c-fms) enabled NFS-60 cells but not FDCP-Mix cells to proliferate in response to CSF-1. The phenotype of NFS-60 cells expressing the human CSF-1 receptor (CSF-1R) grown in CSF-1 did not grossly differ from that of original NFS-60 as assessed by cytochemical and surface markers. Importantly, these cells retained their erythroid potentiality. In contrast, a CSF-1-dependent variant of NFS-60, strongly expressing murine CSF-1R, differentiated into monocyte/macrophages upon CSF-1 stimulation and almost totally lost its erythroid potentiality. We also observed that NFS-60 but not FDCP-Mix cells could grow in response to stem cell factor, (SCF), although both cell lines express relatively high amounts of SCF receptors. This suggests that SCF-R and CSF-1R signalling pathways share at least one component that may be missing or insufficiently expressed in FDCP-Mix cells. Taken together, these results suggest that human CSF-1R can use the SCF-R signalling pathway in murine multipotent cells and thereby favor self-renewal versus differentiation.

L6 ANSWER 6 OF 13 MEDLINE on STN
ACCESSION NUMBER: 91097938 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2268499
TITLE: Interleukin-3.
AUTHOR: Wagemaker G; Burger H; van Gils F C; van Leen R W; Wielenga J J
CORPORATE SOURCE: Institute of Radiobiology, Erasmus University, Rotterdam, The Netherlands.
SOURCE: Biotherapy (Dordrecht, Netherlands), (1990) Vol. 2, No. 4, pp. 337-45. Ref: 41
Journal code: 8903031. ISSN: 0921-299X.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199102
ENTRY DATE: Entered STN: 29 Mar 1991
Last Updated on STN: 29 Mar 1991
Entered Medline: 20 Feb 1991

AB Interleukin-3 (IL-3) is a hemopoietic growth factor involved in the survival, proliferation and differentiation of multipotent hemopoietic cells. In five mammalian species, including man, the gene encoding IL-3 has been isolated and expressed to yield the mature recombinant proteins. The human IL-3 gene encodes a protein of 133 amino acids with two conserved cysteine residues and 2 potential N-linked glycosylation sites; human native IL-3 has not been characterized. Comparison of the IL-3 genes revealed a more rapid evolutionary divergence than has been observed for other hemopoietic growth factors, and, hence, a more pronounced species specificity of the functional proteins was found. In agreement with its stimulatory action on immature multipotent cells, the in vivo actions of homologous recombinant IL-3 in

nonhuman primates include a highly increased production of blood cells along the neutrophilic, eosinophilic and basophilic granulocyte as well as the monocyte, red cell and platelet lineages.

L6 ANSWER 7 OF 13 MEDLINE on STN
ACCESSION NUMBER: 83113658 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7154710
TITLE: Differentiation restriction in the neutrophil-granulocyte, macrophage, eosinophil-granulocyte pathway: analysis by equilibrium density centrifugation.
AUTHOR: Guimaraes J E; Francis G E; Bol S J; Berney J J; Hoffbrand A V
SOURCE: Leukemia research, (1982) Vol. 6, No. 6, pp. 791-800. Journal code: 7706787. ISSN: 0145-2126.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198303
ENTRY DATE: Entered STN: 18 Mar 1990
Last Updated on STN: 18 Mar 1990
Entered Medline: 24 Mar 1983

AB Bone marrow culture techniques and equilibrium density centrifugation of human bone marrow cells were used to analyse the neutrophil-granulocyte, macrophage and eosinophil-granulocyte progenitor hierarchy. The buoyant density of progenitor cells changes as cells differentiate down the granulocyte-macrophage pathway and this allows the construction of a density 'map' of the points at which differentiation decisions are made. Unipotent progenitors, neutrophil-granulocyte (G), monocyte-macrophage (M), eosinophil-granulocyte (Eo), are more dense than bi- and tripotent progenitors (GM and EoGM) and have a lower 7-day proliferative capacity (assessed as the clone size achieved in maximally stimulated agar cultures). Experiments in which marrow cells were separated on a basis of their density and either cultured in agar immediately or after an interval of 6 days in suspension culture, were performed to establish the density of the cells which give rise to each type of progenitor, i.e. to investigate parent-progeny relationships. In each case the parent cells were of lower density than the unipotent or bipotent progenitor in question. The ability to separate, at least partially, unipotent, bipotent and multipotent cells of closely related lineages is important since it facilitates studies of the intracellular events taking place as restriction of the cell's differentiation options takes place.

L6 ANSWER 8 OF 13 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 2004:280064 BIOSIS
DOCUMENT NUMBER: PREV200400280873
TITLE: Interleukin-1 beta (IL-1beta) induces tumor necrosis factor alpha (TNF-alpha) expression on mouse myeloid multipotent cell line 32D cl3 and inhibits their proliferation.
AUTHOR(S): Ledesma, Edgar; Martinez, Ignacio; Cordova, Yolanda; Rodriguez-Sosa, Miriam; Monroy, Alberto; Mora, Lourdes; Soto, Isabel; Ramos, Gerardo; Weiss, Benny; Osorio, Edelmiro Santiago [Reprint Author]
CORPORATE SOURCE: Lab L324, Fac Estudios Super Zaragoza, Campus 2,Batalla 5 Mayo S-N, Iztapalapa, DF, 09230, Mexico
edelmiro@servidor.unam.mx
SOURCE: Cytokine, (April 21 2004) Vol. 26, No. 2, pp. 66-72. print. ISSN: 1043-4666 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Jun 2004
Last Updated on STN: 9 Jun 2004

AB Interleukin-1 alpha (IL-1alpha) and beta (IL-1beta) are well known factors that stimulate hematopoiesis, nevertheless there are reports that show that they can also inhibit this activity. While both IL-1alpha and IL-1beta induce the expression of hematopoietic cytokines, such as growth factors and their receptors on myeloid cells, helping thus to regulate hematopoiesis, it is not known if their inhibitory activity is also mediated through the induction of other specific cytokines. In this work we show that recombinant human IL-1beta (rhIL-1beta) inhibits the proliferation of a mouse IL-3-dependent myeloid multipotent cell line (32D cl3), without inducing its differentiation . We show that rhIL-1beta induces in 32D cl3 cells the expression of the tumor necrosis factor alpha (TNF-alpha) gene. a well known growth inhibitor. and that the rhIL-1beta growth inhibition property oil 32D cl3 cells is partially due to this secreted TNF-alpha, hinting thus that the inhibition of hematopoiesis by IL-1 is mediated through other induced cytokines.

L6 ANSWER 9 OF 13 BIOSIS
ACCESSION NUMBER: 2001:568901 BIOSIS
DOCUMENT NUMBER: PREV200100568901
TITLE: Distinct and regulated expression of Notch receptors in hematopoietic lineages and during myeloid differentiation.
AUTHOR(S): Jonsson, Jan-Ingvar [Reprint author]; Xiang, Zou; Pettersson, Monica; Lardelli, Michael; Nilsson, Gunnar
CORPORATE SOURCE: Department of Laboratory Medicine, Lund University, University Hospital MAS, Entrance 78:3, S-205 02, Malmo, Sweden
Jan-Ingvar.Jonsson@molmed.mas.lu.se
SOURCE: European Journal of Immunology, (November, 2001) Vol. 31, No. 11, pp. 3240-3247. print.
CODEN: EJIMAF. ISSN: 0014-2980.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Dec 2001
Last Updated on STN: 25 Feb 2002
AB Hematopoietic development is a delicate balance of cell fate decisions in multipotent cells between self-renewal and differentiation. In multiple developmental systems, the Notch receptors are important factors regulating these processes. Hematopoietic progenitor cells have been shown to express Notch1, and studies with an activated intracellular form has revealed a functional role. To assess the function of other Notch members in hematopoiesis, we investigated the expression pattern of Notch1, Notch2, and Notch3 in hematopoietic lineages at the level of RNA and protein. We demonstrate that Notch1 and Notch2 are expressed in multiple lineages, and that Notch1 in particular appears to be regulated during myeloid differentiation. Notch1 was up-regulated and expressed at high levels in adherent macrophages. Mast cells expressed only low levels of Notch1 mRNA whereas Notch2 mRNA was highly expressed. In addition we could detect Notch3 mRNA and protein in cell lines representing mast cell progenitors. These expression patterns imply that the different Notch genes may have very distinct functions during hematopoiesis, and that Notch3 could be a specific regulator of mast cell development. The finding that Notch1 was up-regulated in the adherent cells developing from a multipotent progenitor cell line suggests that this protein may posses dual functions in hematopoiesis, i.e. at the stage of cell fate decision, and at the maturation stage of monocytes when adhesion to the specific microenvironment is accomplished.

L6 ANSWER 10 OF 13 BIOSIS
ACCESSION NUMBER: 2000:23934 BIOSIS
DOCUMENT NUMBER: PREV200000023934

TITLE: Differential activity of glycosaminoglycans on colony-forming cells from cord blood. Preliminary results.
AUTHOR(S): Da Prato, Iana; Valentini, Paola; Testi, Rossana; Volpi, Nicola [Reprint author]; Conte, Angela; Petrini, Mario
CORPORATE SOURCE: Department of Animal Biology, Biological Chemistry Section, University of Modena, Via Berengario 14, 41100, Modena, Italy
SOURCE: Leukemia Research, (Nov., 1999) Vol. 23, No. 11, pp. 1015-1019. print.
CODEN: LEREDD. ISSN: 0145-2126.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Dec 1999
Last Updated on STN: 31 Dec 2001

AB Heparin, heparan sulfate and chondroitin sulfate were evaluated for their possible role on proliferation and differentiation of hematological precursor cells from cord blood. For these purposes, different concentrations of glycosaminoglycans were added to methyl-cellulose in colony assay performed with human cord blood derived cells. A volume of 10 mug/ml heparin induces a significant increase of both granulocyte-monocyte and granulocyte colonies, and a decrease of erythroid-colonies, more evident in the presence of 100 mug/ml. Heparan sulfate-treatment induces a significant increase of all granulocyte-monocyte colonies derived from CFU-granulocyte-monocyte, CFU-granulocyte and CFU-monocyte precursors. A significant decrease of multipotent cells was also observed. On the other hand, chondroitin sulfate induces an increase of granulocyte-colonies and a decrease of erythroid-colonies. Glycosaminoglycans with different structure may be useful to increase the number of specific colonies. T he selective and differential binding of glycosaminoglycans with several growth factors and the regulation of their activities is discussed.

L6 ANSWER 11 OF 13 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:339305 BIOSIS
DOCUMENT NUMBER: PREV199396036305
TITLE: Expression of human colony-stimulating factor-I (CSF-1) receptor in murine pluripotent hematopoietic NFS-60 cells induces long-term proliferation in response to CSF-1 without loss of erythroid differentiation potential.
AUTHOR(S): Bourette, Roland P.; Mouchiroud, Guy; Ouazana, Roland; Morle, Francois; Godet, Jacqueline; Blanchet, Jean-Paul [Reprint author]
CORPORATE SOURCE: Centre Genetique Molecularie Cellulaire, UMR CNRS No. 106, Univ. Claude Bernard Lyon I, Bat 741, 43 Boulevard du 11 Novembre 1918, 69622 Villeurbanne Cedex, France
SOURCE: Blood, (1993) Vol. 81, No. 10, pp. 2511-2520.
CODEN: BLOOAW. ISSN: 0006-4971.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jul 1993
Last Updated on STN: 3 Jan 1995

AB NFS-60 and FDCP-Mix cells are interleukin-3-dependent multipotent hematopoietic cells that can differentiate in vitro into mature myeloid and erythroid cells. Retrovirus-mediated transfer of the human colony-stimulating factor-1 (CSF-1) receptor gene (c-fms) enabled NFS-60 cells but not FDCP-Mix cells to proliferate in response to CSF-1. The phenotype of NFS-60 cells expressing the human CSF-1 receptor (CSF-1R) grown in CSF-1 did not grossly differ from that of original NFS-60 as assessed by cytochemical and surface markers. Importantly, these cells retained their erythroid potentiality. In contrast, a CSF-1-dependent variant of NFS-60, strongly expressing murine CSF-1R, differentiated into

monocyte/macrophages upon CSF-1 stimulation and almost totally lost its erythroid potentiality. We also observed that NFS-60 but not FDCP-Mix cells could grow in response to stem cell factor, (SCF), although both cell lines express relatively high amounts of SCF receptors. This suggests that SCF-R and CSF-1R signalling pathways share at least one component that may be missing or insufficiently expressed in FDCP-Mix cells. Taken together, these results suggest that human CSF-1R can use the SCF-R signalling pathway in murine multipotent cells and thereby favor self-renewal versus differentiation.

L6 ANSWER 12 OF 13 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1991:939 BIOSIS
DOCUMENT NUMBER: PREV199191000939; BA91:939
TITLE: INTERLEUKIN-3.
AUTHOR(S): WAGEMAKER G [Reprint author]; BURGER H; VAN GILS F C J M; VAN LEEN R W; WIELENGA J J
CORPORATE SOURCE: INST RADIOBIOL, ERASMUS UNIV, C/O ITRI-TNO PO BOX 5815, 2280 HV RIJSWIJK, NETH
SOURCE: Biotherapy (Tokyo), (1990) Vol. 2, No. 4, pp. 337-346. ISSN: 0914-2223.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 8 Dec 1990
Last Updated on STN: 8 Dec 1990

AB Interleukin-3 (IL-3) is a hemopoietic growth factor involved in the survival, proliferation and differentiation of multipotent hemopoietic cells. In five mammalian species, including man, the gene encoding IL-3 has been isolated and expressed to yield the mature recombinant proteins. The human IL-3 gene encodes a protein of 133 amino acids with two conserved cysteine residues and 2 potential N-linked glycosylation sites; human native IL-3 has not been characterized. Comparison of the IL-3 genes revealed a more rapid evoluntionary divergence than has been observed for other hemopoietic growth factors, and, hence, a more pronounced species specificity of the functional proteins was found. In agreement with its stimulatory action on immature multipotent cells, the in vivo actions of homologous recombinant IL-3 in nonhuman primates include a highly increased production of blood cells along the neutrophilic, eosinophilic and basophilic granulocyte as well as the monocyte, red cell and platelet lineages.

L6 ANSWER 13 OF 13 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1983:297104 BIOSIS
DOCUMENT NUMBER: PREV198376054596; BA76:54596
TITLE: DIFFERENTIATION RESTRICTION IN THE NEUTROPHIL GRANULOCYTE MACROPHAGE EOSINOPHIL GRANULOCYTE PATHWAY ANALYSIS BY EQUILIBRIUM DENSITY CENTRIFUGATION.
AUTHOR(S): GUIMARAES J E [Reprint author]; FRANCIS G E; BOL S J L; BERNEY J J; HOFFBRAND A V
CORPORATE SOURCE: DEP HAEMATOL, ROYAL FREE HOSP, POND ST, LONDON NW3 2QG, UK
SOURCE: Leukemia Research, (1982) Vol. 6, No. 6, pp. 791-800. CODEN: LEREDD. ISSN: 0145-2126.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Bone marrow culture techniques and equilibrium density centrifugation of human bone marrow cells were used to analyse the neutrophil-granulocyte, macrophage and eosinophil-granulocyte progenitor hierarchy. Buoyant density of progenitor cells changes as cells differentiate down the granulocyte-macrophage pathway, and this allows the construction of a density map of the points at which differentiation decisions are

made. Unipotent progenitors, neutrophil-granulocyte (G), monocyte -macrophage (M), eosinophil-granulocyte (Eo), are more dense than bi- and tripotent progenitors (GM and EoGM) and have a lower 7-day proliferative capacity (assessed as the clone size achieved in maximally stimulated agar cultures). Experiments in which marrow cells were separated on a basis of their density and either cultured in agar immediately or after an interval of 6 days in suspension culture, were performed to establish the density of the cells which give rise to each type of progenitor, i.e., to investigate parent-progeny relationships. In each case the parent cells were of lower density than the unipotent, bipotent and multipotent in question. The ability to separate, at least partially, unipotent, bipotent and multipotent cells of closely related lineages is important since it facilitates studies of the intracellular events taking place as restriction of the cell's differentiation options take place.

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FILE 'CAPLUS' ENTERED AT 20:28:52 ON 25 JAN 2007
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E1            1     KUWANA MASAMI/IN
E2            1     KUWANA MASAO/IN
E3            5 --> KUWANA MASATAKA/IN
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E6           36     KUWANA MOTOYUKI/IN
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E11           1     KUWANA RYUICHIRO/IN
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E15           1     KUWANA SHINZO/IN
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E17           1     KUWANA TAKAO/IN
E18           7     KUWANA TAKASHI/IN
E19           1     KUWANA TAKAYUKI/IN
E20           9     KUWANA TAKESHI/IN
E21           1     KUWANA TAKESHI C O JAPAN OXYGE/IN
E22           1     KUWANA TAKKAAKI/IN
E23           1     KUWANA TAKUYA/IN
E24           1     KUWANA TERUAKI/IN
E25           9     KUWANA TERUHISA/IN

=> S (E3) AND (MONOCYTE MULTIPOTENT CELL)
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         43545 MONOCYTE
         31293 MONOCYTES
         53995 MONOCYTE
                  (MONOCYTE OR MONOCYTES)
          2059 MULTIPOTENT
       2165118 CELL
       1888964 CELLS
       2857191 CELL
                  (CELL OR CELLS)
             0 MONOCYTE MULTIPOTENT CELL
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                (MONOCYTE(W)MULTIPOTENT(W)CELL)
L1            0 ("KUWANA MASATAKA"/IN) AND (MONOCYTE MULTIPOTENT CELL)

=> S (E3) AND (MONOCYTE )
              5 "KUWANA MASATAKA"/IN
          43545 MONOCYTE
          31293 MONOCYTES
          53995 MONOCYTE
                (MONOCYTE OR MONOCYTES)
L2            1 ("KUWANA MASATAKA"/IN) AND (MONOCYTE )

=> DIS L2 1 TI

L2   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Monocyte-origin multipotent cell (MOMC)


=> E KODAMA HIROAKI/IN 25
E1            1     KODAMA HIDYO/IN
E2            1     KODAMA HIRO/IN
E3           27 --> KODAMA HIROAKI/IN
E4            1     KODAMA HIROBUMI/IN
E5           12     KODAMA HIROFUMI/IN
E6            2     KODAMA HIROHISA/IN
E7           10     KODAMA HIROKAZU/IN
E8           42     KODAMA HIROKI/IN
E9            2     KODAMA HIROMI/IN
E10           1     KODAMA HIROMICHI/IN
E11           1     KODAMA HIROMITSU/IN
E12           4     KODAMA HIRONOBU/IN
E13          57     KODAMA HIRONORI/IN
E14          11     KODAMA HIROO/IN
E15           1     KODAMA HIROOMI/IN
E16         212     KODAMA HIROSHI/IN
E17           1     KODAMA HIROSKI/IN
E18           2     KODAMA HIROTAKA/IN
E19           7     KODAMA HIROTATSU/IN
E20           1     KODAMA HIROTO/IN
E21           2     KODAMA HIROTOSHI/IN
E22           5     KODAMA HIROTSUGU/IN
E23           1     KODAMA HIROTUGU/IN
E24           2     KODAMA HIROYA/IN
E25          10     KODAMA HIROYOSHI/IN

=> S (E3) AND (MONOCYTE )
             27 "KODAMA HIROAKI"/IN
          43545 MONOCYTE
          31293 MONOCYTES
          53995 MONOCYTE
                (MONOCYTE OR MONOCYTES)
L3            2 ("KODAMA HIROAKI"/IN) AND (MONOCYTE )

=> DIS L3 1 IBIB IABS
THE ESTIMATED COST FOR THIS REQUEST IS 2.83 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L3   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2004:802848  CAPLUS
DOCUMENT NUMBER:          141:319983
TITLE:                    Monocyte-origin multipotent cell (MOMC)
INVENTOR(S):              Kuwana, Masataka; Kodama, Hiroaki
PATENT ASSIGNEE(S):       Keio University, Japan
SOURCE:                   PCT Int. Appl., 75 pp.
                          CODEN: PIXXD2
```

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004083414	A1	20040930	WO 2004-JP3680	20040318
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004275145	A	20041007	JP 2003-74573	20030318
JP 3762975	B2	20060405		
EP 1605040	A1	20051214	EP 2004-721666	20040318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
JP 2006014741	A	20060119	JP 2005-228860	20050805
US 2006171928	A1	20060803	US 2005-549707	20051027

PRIORITY APPLN. INFO.: JP 2003-74573 A 20030318
WO 2004-JP3680 W 20040318

ABSTRACT:
It is intended to provide a multipotent cell which can be non-invasively, conveniently and stably supplied in a necessary and sufficient amount, is free from any rejection troubles in cell transplantation, and is capable of differentiating into various cells including mesenchymal cells such as bone, cartilage, skeletal muscle and fat, vascular endothelial cells, cardiac muscle cells and nerve cells; mesenchymal cells, vascular endothelial cells, cardiac muscle cells and nerve cells differentiated from the multipotent cell; and a therapeutic agent and a therapeutic method using the same as the active ingredient. Peripheral blood monocyte cells (PBMC) are cultured on a fibronectin-coated plastic plate for 7 to 10 days. The resultant fibroblast-like cells are circulatory CD14+ monocyte-origin cells showing a characteristic phenotype CD14+CD45+CD34+I type collagen+. These cells are capable of differentiating into mesenchymal cells such as bone, cartilage, skeletal muscle and fat, vascular endothelial cells, cardiac muscle cells and nerve cells under definite culture conditions.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> DIS L3 2 IBIB IABS
THE ESTIMATED COST FOR THIS REQUEST IS 2.83 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:140699 CAPLUS
DOCUMENT NUMBER: 118:140699
TITLE: Macrophage-monocyte colony-stimulating factor (M-CSF) for treatment of osteopetrosis
INVENTOR(S): Kodama, Hiroaki
PATENT ASSIGNEE(S): Morinaga Milk Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04178334	A	19920625	JP 1990-304538	19901109
PRIORITY APPLN. INFO.:			JP 1990-304538	19901109

ABSTRACT:
Human M-CSF (I) stimulates the growth of damaged bone cells and is effective for the treatment of osteopetrosis. I subunit amino acid sequences are given; I has a mol. weight of 70,000-90,000. I was isolated from urine samples of healthy humans. The efficacy of I was tested with murine models of osteopetrosis.

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